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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,632	11/21/2003	Victor Verbinski	SAIC0055-CCIP2	9218

27510 7590 08/18/2006

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EXAMINER
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GAGLIARDI, ALBERT J

ART UNIT	PAPER NUMBER
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2884

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/717,632	VERBINSKI ET AL.	
	Examiner	Art Unit	
	Albert J. Gagliardi	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 40-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 40-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2 August 2006 has been entered.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-6, 8, 40-42 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bermbach *et al.* (US 5,065,418) in view of Adams *et al.* (US 2004,0086078 A1) and Geus *et al.* (US 5,692,028).

Regarding claim 1, *Bermbach* discloses (Figs. 1-2) a target object inspection system comprising: a first detector (13) for detecting radiation from a radiation source (8); a mobile platform (1) including the first detector (13) and the radiation source (8); and a boom (9) connected to the radiation source (8) and the mobile platform (1), wherein the boom is deployed so as to effect passage of the target object between the radiation source and the first detector (see generally fig. 2).

Regarding the use of a second detector for detecting radiation from the target object, the examiner notes that passive detection of radiation emitted from target objects is well known. In addition, *Adams* discloses an arrangement comprising both active target inspection including a radiation source and passive sensing of radioactive or fissile materials (§§ 0002-0004) wherein the passive sensing may be performed by a second detector (§ 0007). *Adams* teaches (as is also well known) that such a combination is advantageous (§ 0004). Therefore it would have been obvious to a person of ordinary skill in the art to modify the invention suggested by *Bermbach* to further include a second detector for detecting radiation from the target object so as to allow for a more advantageous combination system as suggested by *Adams*.

Regarding the particular configuration of the inspection system being arranged such that the target object passes along side of the inspection system, such configurations are well known in the art (see for example *Geus* at Fig. 1). Absent some degree of criticality, the particular configuration of the system such that the target object passes through the mobile platform or along side of the mobile platform, as suggested by *Geus*, is considered a matter of routine design choice within the skill of a person of ordinary skill in the art depending on the needs of the application.

Regarding claim 2, *Bermbach* discloses that the first detector is a photon (i.e., x-ray) detector.

Regarding claim 3, in the system suggested by *Bermbach* in view of *Adams, Adams* discloses that the second detector is a neutron detector (§ 0007).

Regarding claim 4, *Bermbach* discloses that the first detector (13) detects radiation from the radiation source (8) after the radiation passes through the target object (5) (see generally Fig. 2).

Regarding claim 5, although *Bermbach* specifically identifies the source is an x-ray source, those skilled in the art appreciate that x-ray sources and gamma source are well known as functionally equivalent sources for purpose of generating high energy photons for inspection purposes, and absent some degree of criticality, the substitution of a gamma source for an x-ray source is considered a matter of routine design choice depending on the needs of the application.

Regarding claim 6, although not specifically disclosed, those skilled in the art appreciate that helium based neutron detectors are well known and, absent some degree of criticality, would have been a matter of routine design choice.

Regarding claim 8, in the system suggested by *Bermbach* in view of *Adams, Adams* discloses that the detection of neutrons can result in an alert (§ 0027). The use of an indicator to signal the presence of an alert would have been an obvious, if not inherent, design choice.

Regarding claim 40, *Geus* teaches that mobile inspection systems may be configured either as a trailer or a truck including a truck bed (col. 2, lines 36-55).

Regarding claim 41, in the system suggested by *Bermbach* in view of *Adams* and *Geus*, the first and second detectors would be in the truck bed.

Regarding claim 42, in the system suggested by *Bermbach* in view of *Adams* and *Geus*, *Adams* discloses that the second detector is a neutron detector (§ 0007). Regarding the mode of operation as being always on (continuous) capable of being shut off by an operator (intermittent), such modes of operation are well known in the art and would have been obvious design choice depending on the needs of the application.

Regarding claim 47, in the system suggested by *Bermbach* in view of *Adams* and *Geus*, the mobile platform is capable of inspecting a target object in either when the platform is stationary or moving.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Bermbach*, *Adams* and *Geus* as applied above, and further in view of *Kubierschky* (US 4,893,015).

Regarding claim 7, *Bermbach* discloses that the system includes a system for processing signals collected from the detector and calculating an image in known manner (col. 3, lines 36-46) and a display (27) responsive to the collected signals and generating a display (col. 3, lines 46-55). Regarding the processing of signals including a counter for discretely counting photons, *Kubierschky* discloses that typical methods for detecting and measuring radiation can include a discrete photon counting mode (col. 1, lines 39-42). Therefore, absent some degree of criticality, it would have been obvious to a person of ordinary skill in the art to specify that the system includes a counter for discretely counting the photons so as to allow for the processing of signals from the radiation detectors in a known manner.

Claims 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bermbach*, *Adams* and *Geus* as applied above, and further in view of *Johnston* (US 5,679,956).

Regarding claim 43, *Johnston* discloses (Fig. 1) a radiation inspection system including a velocity measuring device (col. 4, line 66 to col. 5, line 15). *Johnston* teaches, as is otherwise

well known, that sensitivity of inspection systems generally decreases at higher speeds (col. 5, lines 11-15). Therefore it would have been obvious to a person of ordinary skill in the art to further include a velocity measuring device to insure that target speeds remain low enough to insure the desired degree of sensitivity.

Regarding claims 44-46, absent some degree of criticality, the particular type of velocity measuring device is considered a matter of routine design choice depending on the needs of the application.

### ***Response to Arguments***

6. Applicant's arguments filed 2 August 15, 2006 regarding the claims as amended have been fully considered but they are moot in view of the new ground(s) of rejection.

7. Applicant's additional argument against the *Adams* reference has been fully considered but is not persuasive. Regarding the effective date of the *Adams* reference, the examiner notes that *Adams* is cited for the teaching of a second detector, which was not disclosed in any of the applications filed previous to the *Adams* reference. The examiner additionally notes that, regardless of applicant's argument, it was stated that detection of radiation from target objects is well known. Further evidence of the well-known detection of radiation from target objects is also evidenced from the *Johnston* reference, which predates any priority claim, regardless of any disclosure.

### ***Conclusion***


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert J. Gagliardi whose telephone number is (571) 272-2436. The examiner can normally be reached on Monday thru Friday from 10 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Albert J. Gagliardi  
Primary Examiner  
Art Unit 2884

AJG